

**SEALANTS**

**CRL 777 BUTYL RUBBER SEALANT**

**PRODUCT NAME**

CRL 777 Butyl Rubber Sealant

**PRODUCT DESCRIPTION**

CRL 777 is a unique, butyl based sealant specially formulated using a blend of age resistant polymers to give excellent weathering properties at various temperature extremes.

Our CRL 777 Butyl Rubber Sealant offers excellent adhesion to all clean surfaces; and will withstand joint movement of +10% without affecting its water tightness. Also, it has a special U.V. fighting agent for exceptional service life.

CRL 777 Butyl Rubber Sealant complies with the following Federal Specifications:

- TTS-001657, Type 1, TT-C00598C & TT-C-1796A, ASTM C 1311 and AMA 808.3, USDA Certified

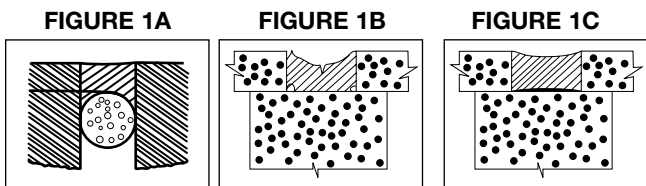
**JOINT DESIGN**

Because this sealant has a +10% movement capacity the width should be 10 times the expected movement in both the vertical and horizontal direction.

The second factor to consider is that the sealant should never be thicker than 1/2 inch (see Table 2 below).

TABLE 2 - JOINT WIDTH AND SEALANT DEPTH	
Joint Width Inches	Sealant Depth at Midpoint Inches
1/4" to 1/2"	1/4"
1/2" to 1"	3/8" to 1/2"
1" to 2"	1/2"

The third consideration as with all sealants, three sided adhesion must be prevented by use of the proper bond breaker material (see Figure's 1A, 1B and 1C).



**FIGURE 1A**  
Backer-Rod is installed by compressing and rolling it into joint channel without stretching lengthwise. The Rod must conform to mfg. recommendations as to size in relationship to joint width. When using Closed Cell Backer-Rod do not puncture during installation.

**FIGURE 1B**  
Joints without Bond Breaker—three sided adhesion causes joint failure.

**FIGURE 1C**  
Joints with Bond Breaker. Two sided adhesion allows sealant to stretch with joint movement.

**TECHNICAL DATA**

The physical properties of CRL 777 Butyl Rubber Sealant are shown below.

TABLE 1 - PHYSICAL PROPERTIES	
Property/Test Methods	Value
Shore A Hardness, ASTM D-2240	.15 (After two weeks @ 190°F)
Heat Resistance	None @ 158°F
U.V. Resistance	No effect after 1 month of U.V. Aging
Dynamic Properties	+10% Joint Movement
Base Polymer	Butyl Rubber
Solid Content	.80% Minimum
Method of Cure	.90% Cured in 21 Days. Solvent Release
Tack Free Time, ASTM D2377	.2 Hours
	(Ambient Temperature, 20 Shore A at 190°F)
Sag or Flow, ASTM D2202	Excellent Resistance
	0.15 Inch Maximum
Application	0° to 120° F (-17°C to 49°C)
Service Temp Range	-20° to 200° F (-28°C to 93°C)
Shrinkage	.20% Maximum
Adhesion	Most Clean Surfaces
Paint Time	.24 Hours

**LIMITATIONS**

Not Recommended For:

- CRL 777 Butyl Rubber Sealant is NOT recommended for use in window glazing applications with insulated glass units, or hidden joint details that require a non-skinning, non-hardening sealant.
- CRL 777 Butyl Rubber Sealant is not recommended for use in sealing horizontal decks, patios, driveways or terrace joints where abrasion or physical abuse is encountered.
- CRL 777 Butyl Rubber Sealant is not recommended for interior or exterior structural sealing below the waterline in marine applications.
- Not recommended for surface with special protective or cosmetic coatings without prior consultation of the manufacturers. Such surfaces include, but are not limited to, mirrors, reflective glass, surfaces coated, polyethylene or polypropylene.
- CRL 777 Butyl Rubber Sealant should not be applied with wet tooling techniques; using solvents; water or detergent/soap solutions is not recommended.
- CRL 777 Butyl Rubber Sealant should not be applied to unpredictably absorptive surfaces such as marble, limestone, or granite unless a standard of appearance has been agreed on as a result of testing for stain and/or discoloration.

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- CRL 777 Butyl Rubber Sealant should be tested for adhesion on all high performance coated metals.

**BASIC USES**

CRL 777 Butyl Rubber Sealant features excellent adhesion to wood, masonry, glass, and metal surfaces, and is recommended for application within hidden joints. Hidden areas such as under still cans, thresholds, and screw heads are excellent applications for good butyl sealants.

Other areas such as between metal building panels, wall-mounted air conditioning units, under aluminum siding, and gutters are all proven applications for good butyl sealants. The application temperature range is 0°F to 120°F (-17°C to 49°C).

**CLEANING**

Clean all joints by removing foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants and any protective coatings.

Porous substrates should be cleaned as necessary by grinding, saw cutting, blast cleaning (sand or water), mechanical abrading or a combination of these methods that will be required to provide a sound, solid clean and dry surface for sealant application. Dust, loose particles, etc., should be blown out of joints with oil-free compressed air or vacuum cleaned.

Non-porous and plastic surfaces should be cleaned by a solvent procedure or by mechanical means. Detergent or soap and water cleaning treatments are not recommended. Protective films must be removed by a solvent recommended by the manufacturer of the compound or by other means that leave no residue. In all cases use one lean cloth or lintless paper towel for the solvent. Cleaning solvents should not be allowed to air-dry or evaporate without being wiped. Architectural coatings, paints, and plastics should be cleaned with a solvent approved by the manufacturer of that product.

Cleaning of all surfaces should be done on the same day in which the sealant is applied. caution! solvents may be flammable and are toxic.

**APPLICATION**

Install back-up material or joint filler, spacer shims and tapes as specified. Apply CRL 777 Butyl Rubber Sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint. Tool the sealant with adequate pressure to spread the sealant against the back-up material and onto the joint surfaces. A tool with a concave profile is recommended to keep the sealant within the joint.

Excess sealant should be dry-wiped from all surfaces while still uncured, following with a commercial solvent such as xylol, toluol, or methylethyl ketone. Should sealant accidentally begin to cure on adjacent porous surface, the excess sealant should be allowed to progress through the initial cure or set-up. It should be removed promptly by

abrasion or other mechanical means.

CURED SEALANT IS USUALLY VERY DIFFICULT TO REMOVE WITHOUT ALTERING OR DAMAGING THE SURFACE TO WHICH THE SEALANT HAS BEEN MISAPPLIED.

**COLORS**

CRL 777 Butyl Rubber Sealant is available in white, gray, black and bronze. Color matching is available on orders of 800 gallons minimum.

**PRECAUTION**

Uncured sealant may irritate eyes. Avoid contact with eyes and skin. Contact lens wearers take appropriate precautions. In case of contact, flush eyes with water, call a physician. Remove from skin with a dry cloth or paper towel. Keep out of reach of children.

**SHELF LIFE**

When stored below 80°F (27°C) CRL 777 Butyl Rubber Sealant has a shelf life of twelve months from date of shipment from CRL warehouse facilities.

**PACKAGING**

11 fl. oz. (325 ml) Cartridges - 30 Per Case; 5 Gallon Pails or 55 Gallon Drums

**MAINTENANCE**

No maintenance should be needed. If sealant becomes damaged, replace damaged portion. Clean surfaces in damaged area and repair with fresh CRL 777 Butyl Rubber Sealant.

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**TECHNICAL SERVICE**

Complete technical information and literature is available from C.R. Laurence Co., Inc. Any technical advice furnished by the company or any representative of the company concerning any use or application of any sealant is believed to be reliable, but the company makes no warranty, expressed or implied, for any use or application for which such advice is furnished.

**LIMITED WARRANTY NOTICE**

CRL and its manufacturer warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products but also upon many factors beyond our control in the application process. Therefore, except for such replacement or refund CRL and its manufacturers make no warranty or guarantee, expressed or implied, including warranties of fitness merchantability, respecting its products. CRL and its manufacturers shall have no other liability with respect thereto. User shall determine the suitability of the product for his intended use and assume all risks and liability in

connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the CRL Product Manager.

**COOPERATIVE TESTING**

Materials submitted for testing should be sent to:

C.R. Laurence Co., Inc.  
 Technical Sales Department  
 PO Box 58923  
 Los Angeles, CA 90058-0923

This program is intended to eliminate potential field problems by pretesting CRL construction sealants with sample of the building materials on which the sealant will be applied. The test will aid in determining the proper surface preparation method, effective solvents for cleaning and whether priming is necessary to achieve optimum adhesion. Following this procedure will remove many of the unknown variables which affect field success.

Test samples of substrates should be identified as to manufacturer, origin, designed use building project, person and firm originating the request. Appropriate sketches or drawings showing the intended use can be helpful.

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🍁 **CRL Canada** 🍁

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